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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,769	09/14/2006	Werner Reinhart	1093-146 PCT/US	9833
23869	7590	09/01/2010	EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,769	Applicant(s) REINHART ET AL.	
	Examiner David J. Joy	Art Unit 1785	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/02/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-4 and 6-28 are pending as amended on July 14, 2010, with Claim 5 having been cancelled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 14, 2010 has been entered.

Response to Amendment

4. Applicant's cancellation of Claim 5, in the amendment filed on July 14, 2010, renders the previously cited rejection under 35 U.S.C. §102 moot. As such, the rejection

of Claim 5 under 35 U.S.C. §102(b), as being anticipated by the U.S. Patent of Burchard et al. (6,030,691; hereinafter "Burchard"), has been withdrawn.

Claim Rejections - 35 USC § 102

5. Claims 1-4, 6-10 and 12-28 stand rejected under 35 U.S.C. 102(b) as being anticipated by Burchard.

6. Burchard teaches a strip for safeguarding a document ("antifalsification paper having a security element in the form of a thread of band") having a longitudinal direction and two opposing surfaces, and in the longitudinal direction an alternation of metallic regions and transparent regions, such that the regions extend between the opposing surfaces of the strip (see Abstract; see also Figures 1-3; see also Column 2, Lines 43-65; see also Column 4, Lines 30-50). Burchard also teaches that the alternating metallic and transparent regions produce a macro-contrast on the document that makes forgeries difficult and prevents the document from being imitated with a copying machine (see Column 2, Lines 43-65). In addition, Burchard teaches that strip includes optically active elements associated with the metallic and transparent regions that produce an optical effect on a less than macro-contrast scale (i.e., micro-contrast) that makes it possible to identify the document (see Column 3, Lines 23-60). Specifically,

Burchard provides that the strip includes large, easy-to-read writing (with “large” defined as being 1 mm high) and small writing visually difficult to resolve (with “small” defined as being smaller values) (*Id.*).

7. Burchard teaches that the strip produces an optical effect that is dependent on the angles of illumination and/or observation of the strip, and that the strip also produces a contrasting color shift (or multicolor shift) (see Column 3, Line 61 – Column 4, Line 12). Burchard also teaches that the transparent regions of the strip can be coated with a varnish that produces a glossy effect visible to the naked eye, given that Burchard recites that the transparent substrate can be coated with dyes that include luminescent inks that improve the visual impression of the thread material even further and make it more effective (*Id.*). Further, Burchard teaches that the optically active elements are metallized optically active structures, and that the structures can comprise such elements as purely reflective metallized zones, diffraction lines, holographic zones, demetallized zones of a metallized area, a zone bearing printing, and a metallized zone of a transparent region (see Figures 2 and 3; see also Column 2, Lines 43-65; see also Column 4, Lines 40-59; see also Column 5, Lines 1-24; see also Column 6, Lines 26-44). Additionally, Burchard teaches that the optically active structures comprise different zones of the elements, that some of the zones are not perceptible to the naked eye, that

the optically active elements are associated with purely metallic regions, and that the purely metallic regions are disposed on respective sides of the metallized regions of the strip (see Figures 2, 3, 5 and 9; see also Column 4, Lines 40-59; see also Column 5, Lines 1-13; see also Column 5, Line 59 – Column 6, Line 2; see also Column 6, Lines 15-26).

Burchard also teaches that the purely metallic regions are disposed such that a transparent interval is located between the purely reflective region and the metallized region (see Figures 10 and 11; see also Column 6, Lines 3-14). In addition, Burchard teaches that the optically active elements can be associated with transparent regions, that the metallized regions can be disposed adjacently to the transparent regions, and that there can be an interval between the metallized regions and the transparent regions (see Figures 2-5, 7, 9 and 10; see also Column 4, Lines 40-59; see also Column 5, Lines 1-13; see also Column 5, Lines 25-35; see also Column 5, Line 59 – Column 6, Line 5; see also Column 6, Lines 15-26). Burchard also teaches that the intervals can be metallized and diffractive zones, printed zones, or a hologram (*Id.*). Burchard also provides that the optically active elements are in register relationship with the metallized and/or transparent regions of the strip (see Figures 2-4; see also Column 4, Lines 40-67).

Additionally, Burchard provides that the regions and the optically active elements can be luminescent motifs (“luminescent characters or patterns”), and that the luminescent motifs can be printed so as to overlap the metallic regions or the strip, overlap the

transparent portions of the strip, or be incorporated into the strip (see Figures 2-7; see also Column 3, Line 62 – Column 4, Line 12; see also Column 4, Line 40 – Column 5, Line 35). Further, Burchard recites that the strip can be incorporated into such security documents as bank notes, checks, shares, traveler's checks, check and credit cards, passports, identity cards (see Figure 1; see also Column 1, Lines 19-32; see also Column 4, Lines 30-39).

Claim Rejections - 35 USC § 103

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burchard, as applied to Claim 10 above, and further in view of the U.S. Patent Application Publication of Holmes et al. (2003/0058491; hereinafter "Holmes").

9. Burchard teaches a strip for safeguarding a document having optically active elements that are associated with metallized regions, and that the elements can be several different types of optically active structures, as discussed *supra*. However, Burchard is silent as to whether the optically active structure can be a diffraction mat integrated into a metallized region. Burchard, though, does expressly recite that the strip can ensure high resistance to forgery by providing at least two types of antifalsification information (see Column 2, Lines 37-42).

10. Holmes, which is drawn to an optically variable security device, teaches that an optically variable security device can incorporate diffraction based optically variable devices, and that the device can include a structure that exhibits a first optically variable effect and a second structure either on or in the first structure that exhibits a second optically variable effect (see ¶¶ [0003]-[0007]). By incorporating a second diffraction based optically variable structure into a first diffraction based optically variable structure, such that each structure exhibits a different optically variable effect, a security document can be produced that will be highly resistant to counterfeiting or forgery. As both Burchard and Holmes are drawn to the same field of invention, it would have been obvious to a person having ordinary skill in the art at the time of invention to make a security strip having antifalsification information such as that taught by Burchard, but to incorporate first and second diffraction based optically variable structures into the security strip as taught by Holmes, in order to ensure that the strip is not able to be counterfeited or forged, thereby arriving at the presently-claimed invention.

Response to Arguments

11. Applicant's arguments filed July 14, 2010 have been fully considered but they are not persuasive.

12. Applicant argues that there is no teaching or suggestion in the Burchard reference that the small writing is formed by “optically active elements” with optically active structures, as Burchard only teaches “small negative writing”. However, Examiner respectfully disagrees with Applicant’s assertion. As discussed *supra*, Burchard teaches that the strip includes optically active elements associated with the metallic and transparent regions that produce an optical effect on a less than macro-contrast scale (i.e., micro-contrast) that makes it possible to identify the document (see Column 3, Lines 23-60). In particular, Burchard provides that for positive print (8) one can also use metallic or metallic-looking inks. Positive writing (8) can be applied with a silvery ink. It is also possible to print negative writing with any desired opaque ink. Alternatively, both pieces of information can be represented by a metallic coating. In this case, not only background (4) of the negative writing consists of metal but also positive writing (8) (see Figures 2-4, 6 and 7; see also Column 4, Lines 40-59; see also Column 5, Lines 14-35). As a result, Burchard expressly provides that the small writing is formed by “optically active elements” with optically active structures (i.e., purely reflective metalized zone, metalized zone of a transparent region, etc.).

13. Applicant also argues that Holmes neither teaches nor suggests what is required by the claims and that Holmes does not overcome the deficiencies in Burchard.

However, Examiner respectfully disagrees with Applicant's assertions. As discussed hereinabove, there are no deficiencies in Burchard for Holmes is used to provide. As for the assertion that Holmes does not teach or suggest what is claimed, Examiner agrees with Applicant that Holmes does not teach or suggest all of what appears in the claims. However, Holmes was used as a secondary reference to teach only what is claimed in dependent Claim 11. While Holmes does not disclose all the features of the present claimed invention, Holmes is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 U.S.P.Q. 224, 226 (C.C.P.A. 1973); *In re Keller* 624 F.2d 413, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981). Rather, Holmes teaches a certain concept and in combination with Burchard, the references disclose the presently-claimed invention.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Joy whose telephone number is (571) 272-9056.

The examiner can normally be reached on Monday - Friday, 7:00 AM - 3:30 PM EST.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on (571) 272-1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Ruthkosky/
Supervisory Patent Examiner, Art Unit 1785

/DJJ/
Examiner, Art Unit 1785